Applying for the NINDS F32

Goals of the NINDS F32

The NINDS F32 mechanism is designed to

- 1. encourage postdoctoral candidates to have in depth discussions with postdoctoral mentors about great potential research projects and training before, or immediately upon starting, their postdoctoral position;
- 2. encourage postdoctoral fellows to pursue creative, novel, impactful projects that are intellectually generated by the integration of their ideas with those of their mentors and
- 3. encourage trainees and postdoctoral mentors to develop a robust training plan prior to, or early in, the postdoctoral training period.

In accordance with these goals, candidates who wish to receive NINDS F32 support must develop a strong research and training <u>plan</u> prior to, or shortly after, starting in a postdoctoral lab. Applications for the NINDS F32 will only be accepted from candidates who have not yet joined the postdoc lab, or who are within the first 12 months after starting in the lab. **To facilitate early submission of applications, the inclusion of preliminary data in NINDS F32 applications is not needed, and is, in fact, discouraged.**

The F32 is designed for new training. Training involves not only learning new techniques but also approaches to doing science and exposure to different ways of thinking. Consequently, F32 applications will not be supported if the F32 applicant is remaining in the same research environment as the predoctoral or a prior postdoctoral experience.

Why are preliminary data discouraged?

Eliminating the requirement for preliminary data will enable applicants to apply for an F32 prior to, or shortly after entering the lab. In addition, however, NINDS is hoping that candidates, via early discussions with their mentors, will generate bold, original, creative, impactful research projects. Eliminating the need for preliminary data will eliminate the need for candidates to simply jump onto previously designed, ongoing projects in order to generate preliminary data quickly for a fellowship application.

What about feasibility?

Generally, preliminary data are included to demonstrate the feasibility of the experimental approach and to support the stated hypotheses. For this NINDS F32, reviewers will not rely on preliminary data to evaluate feasibility. Rather, reviewers will judge whether they believe the proposed project is feasible based on the clarity of the research description and the mentor's expertise and prior accomplishments. The following lists several examples for guidance.

1) If the mentor has a strong track record of electrophysiological recording from neurons in one brain region, and the applicant proposes a project that involves electrophysiological recording from another accessible brain region, reviewers might reasonably conclude that the mentor has the technological, experimental and biological expertise to successfully guide the project, even in the absence of preliminary data. Of course, if there are potential challenges with recording from a different brain region, reviewers will expect to see this explained in the application. An important component of the application will be the demonstration of awareness of challenges and approaches to overcoming these challenges.

- 2) In contrast, if an applicant's proposal depends on the use of an imaging technique in a lab that has no imaging expertise, reviewers might question the feasibility of the project in that laboratory, or the sufficiency of planning put into project implementation if there is a lack of relevant expertise for the proposed project.
- 3) In example 2, suppose the primary mentor lacks expertise in imaging but the application includes a co-mentor involved who is an expert in imaging. Then, reviewers will be expected to judge, based on what is presented in the application (both in the quality of the candidate's experimental description and in the mentors' letters), whether the co-mentor is intellectually invested in the project and the success of the applicant, and whether the resources (e.g. access to imaging equipment, expert guidance in conducting imaging experiments, etc.) will be available for the successful conduct of the proposed research and based on this, whether the candidate and project are likely to succeed.

Is there ever a place for preliminary data?

For the NINDS F32, preliminary data may be useful when experiments are proposed that reviewers could reasonably believe cannot be done in the proposed research environment. For example, if a candidate proposes to do intracellular recording from cells in four different brain regions simultaneously in an awake, behaving animal, it would be wise to demonstrate that it can be done.

Despite the intent, will reviewers give preference to applications with preliminary data?

It is the intent of NINDS that F32s be evaluated without consideration of preliminary data. Reviewers will be instructed that preliminary data should neither help nor hurt applications. Note: In addition to the considerations in the paragraph just above, there is one exception to this. If preliminary data demonstrate poor quality research, a lack of rigorous explanation, a poor understanding of statistics, or are presented poorly, reviewers are likely to view the data presented negatively not because of the science but because of a lack of appreciation for scientific quality.

How do I demonstrate to reviewers my contribution to the proposed research project?

In the application, the mentor must explicitly describe his or her contribution to the research plan, the portion of the research ideas and plan originated with the candidate, and the relationship of the proposed F32 research to existing projects in the mentor's lab. Critically, the best way for an applicant to demonstrate his or her contribution to the proposed project is to distinguish his or her work from that of others by using the first person singular narrative when describing hypotheses and the work that will be done, and to attribute hypotheses and work done by others appropriately.

Am I more likely to get an NINDS F32 if I delay applying until I get some experience in the postdoctoral laboratory?

The intent is for there to be no preference in review or by NINDS based on when an applicant applies. The determination of which F32 applications receive support will be based on the reviewers' evaluation of the merit of the application as defined by the review criteria in the funding opportunity announcement.

What constitutes a "different lab or research environment?"

The research environment is not just the immediate lab but the cohort of scientists that form the applicant's local scientific community. A change of institution constitutes a change in research environment, unless the move involves working with prior mentors. If an applicant stays at an institution where he or she previously trained, the application must convincingly explain in their application how this represents a complete change in environment. If the research environment includes many of the

same scientists as a previous experience, it is not different enough to warrant consideration of F32 support. If, however, an applicant is conducting research at the same institution but interacting with a different group of scientists in a different research area, then reviewers might consider the environment to be sufficiently different to have enthusiasm for the F32.

The NINDS F32 is different from the NIH-wide F32. The key differences are outlined below.

- Eligibility: Applicants are eligible to apply within approximately one year prior to joining a postdoctoral laboratory to within the first 12 months of starting in that laboratory. F32 applications will not be considered for funding if the candidate has been in the postdoctoral lab or research environment longer than 12 months at the time of the application receipt date. The eligibility window applies for both new and resubmission applications.
- **Duration of Support:** The NINDS F32 can be used to support postdoctoral fellows for the first 3 years in a given postdoctoral laboratory or research environment. So, for example, if applicants wait until late in their first postdoctoral experience to apply, and receive the award 6 months into their 2nd postdoctoral year, they will be eligible for up to 18 months of support. *Note:* Support may be requested for a first or second mentored postdoctoral position, but a second position will only be supported if the laboratory, research environment and mentor(s) are completely different from the applicant's first postdoctoral experience.
- Preliminary data are discouraged-in order to encourage earlier submissions, the inclusion of
 preliminary data is discouraged. Applicants will neither benefit nor be penalized if preliminary
 data are included (see discussion and exceptions to this above).
- Candidates should carefully read all descriptions, instructions and review criteria in the FOA for an understanding of how the applications will be evaluated.
- NINDS F32 applications will be reviewed by the NINDS Scientific Review Branch.

See NIH Program Announcement: PAR-16-458

Application Form SF424

Application Receipt Dates: April 8, August 8 and December 8

NRSA FY2017 Stipend Levels: NOT-OD-17-003